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21
Parts 170 to 199
Revised as of April 1, 2001

Food and Drugs

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EXHIBIT B

petition (or within 180 days if the time is extended as provided for in section 409(c)(2) of the Act), a regulation prescribing the conditions under which the food additive may be safely used (including, but not limited to, speci-fications as to the particular food or classes of food in or on which such additive - may be "used," the 'haximum quantity that may be used 'or 'permitted to remain in or on such food. the manner in which such additive may be added to or used in or on such food, and any directions or other labeling or packaging requirements for such additive deemed necessary by him to assure the safety of such use), and prior to the forwarding of the order to the FEDERAL REGISTER for publication shall notify the petitioner of such order and the reasons for such action; or by order deny the petition, and shall notify the petitioner of such order and of the reasons for such action.

(b) The regulation shall describe the conditions under which the substance may be safely used in any meat product, meat food product, or poultry product subject to the Federal Meat Inspection Act (FMIA) (21 U.S.C. 601 et seq.) or the Poultry Products Inspection Act (PPIA) (21 U.S.C. 451 et seg.).

(c) If the Commissioner determines that additional time is needed to study and investigate the petition, he shall by written notice to the petitioner extend the 90-day period for not more than 180 days after the filing of the pe-

[42 FR 14489, Mar. 15, 1977, as amended at 65 FR 51763, Aug. 25, 2000]

#### § 171.102 Effective date of regulation.

A regulation published in accordance with §171.100(a) shall become effective upon publication in the FEDERAL REG-ISTER.

#### § 171.110 Procedure for objections and hearings.

Objections and hearings relating to food additive regulations under section 409 (c), (d), or (h) of the Act shall be governed by part 12 of this chapter.

[42 FR 14491, Mar. 15, 1977, as amended at 42 FR 15674, Mar. 22, 1977]

#### \$171.130 Procedure for amending repealing tolerances r exemp from tolerances.

(a) The Commissioner, on his initiative r n the petition of an terested person, pursuant to part this chapter, may propose the using of a regulation amending or repe regulation pertaining to a food add or granting or repealing an exce for such additive.

(b) Any such petition shall include assertion of facts, supported by showing that new informati n with respect to the food additive that new uses have been develop old uses abandoned, that new days ical, or that experience with the ing regulation or exemption ma tify its amendment or repeal. New shall be furnished in the form speci in §§ 171.1 and 171.100 for submitting titions.

(42 FR 14491, Mar. 15, 1977, as amende FR 15674, Mar. 22, 1977]

# PART 172—FOOD ADDITIVES P MITTED FOR DIRECT ADDITION FOOD FOR HUMAN CONSUM TION

#### **Subpart A-General Provisions**

172.5 General provisions for direct foo ditives.

#### Subpart B—Food Preservativés

- 172.105 Anoxomer.
- BHA. 172.110 172.115
- BHT
- Calcium disodium EDTA.
- 172.130 Dehydroacetic acid.
- Dimethyl dicarbonate 172.133 172,135 Disodium EDTA.
- 172.140 Ethoxyquin.
- 172.145 Heptylparaben.
- 172.150 4-Hydroxymethyl-2,6-di-tert-butyl phenol.
- 172.155 Natamycin (pimaricin).
- 172,160 Potassium nitrate. 172.165 Quaternary
- ammonium chloride combination.
- 172.170 Sodium nitrate. 172.175 Sodium nitrite.
- 172,177 Sodium nitrite used in proces
- smoked chub.
- 172.180 Stannous chloride
- 172.185 TBHQ.
- 172.190 THBP.

172.836

172.838

172.840

172.841

172.842

172.844

172.846

172.848

Polysorbate 60.

Polysorbate 80.

Polydextrose.

Sorbitan monostearate.

Calcium stearoyl-2-lactylate.

Sodium stearoyl lactylate. Lactylic esters of fatty acids.

Polysorbate 65.

172.635 Disodium inosinate.

172.560 Modified hop extract.

112.580 Safrole-free extract of sassafras.

171.565 Sugar beet extract flavor base.

172.590 Yeast-malt sprout extract.

172.560

Common name	Scientific name	Limitations
Sandalwood, white (yellow, or East Indian) Sandarac	Santalum album L. Tetraclinis articulata (Vahl.), Mast	in alcoholic bever
Sarsaparilia	Smilax aristolochiaefolia Mill., (Mexican sarsaparilla), 8. regelli Killip et Morton (Honduras sarsaparilla), 8. febrituga Kunth (Ecuadorean sarsaparilla), or undetermined Smilax spp. (Ecuadorean or Central American sarsaparilla).	
Sassafras leaves	Sassafras albidum (Nutt.) Nees	Safrole free
Senna, Alexandria	Cassia acutifolia Delle.	1.00
Serpentaria (Virginia snakeroot)	Aristolochia serpentaria L	in alcoholic bever
Chamba had	<b>1 1 1 1 1 1 1 1 1 1</b>	only
Sinaruba bark	Simaruba amara Aubi	Do. 15 M
Snakeroot, Canadian (wild ginger)	Asarum canadense L.	
•	Picea glauca (Moench) Voss or P. mariana (Mill.) BSP.	in i
Storax (styrax)	Liquidambar orientalis Mill. or L. styraciffus L.	il ilian
Tagetes (marigold)	Tagetes patula L., T. erecta L., or T. minuta L. (T. glandulifera Schrank).	As oil only
Tansy	Tanacetum vulgare L	In alcoholic bevery
	a provide raid or	hovernoe Was
Thistie, blessed (holy thistie)	Onicus benedictus L	only; finished to beverage this of the latest the lates
Thymus capitatus (Spanish "origanum")	Thymus capitatus Hoffmg. et Link.	Orny
Tolu	Myroxylon balsamum (L.) Harms.	
Turpentine	Plnus palustris Mill. and other Pinus spp. which yield	
•	terpene oils exclusively.	. u 1
Valerian rhizome and roots	Valeriana officinalis L.	71 × ¥ 3
Veronica	Veronica officinalis L	Do. 54
Vervain, European	Verbena officinalis L	Do.
Vetiver	Vetiveria zizanioides Stapi	Do.
Violet, Swiss	Viola calcarata L.	- 1
Walnut husks (hulls), leaves, and green nuts Woodruff, sweet	Juglans nigra L. or J. regia L.	· · · · · · · · · · · · · · · · · · ·
770001011, 5W061	Asperula odorata L	In alcoholic beverag
Yarrow	Achillea millefolium L	only 🦸
	Activities inherotopy L	In beverages only; is ished beverage in
Yerba santa	Eriodictyon californicum (Hock, et Am.) Torr.	free1
Yucca, Joshua-tree	Yucca brevitolia Engelm.	5
Yucca, Mohave	Yucca schidigera Roezi ex Ortgles (Y. mohavensis Sarg.).	ų •

1 As determined by using the method (or, in other than alcoholic beverages, a suitable adaptation thereof) in section the "Official Methods of Analysis of the Association of Official Analytical Chemists," 13th Ed. (1980), which is incorpora erence. Copies may be obtained from the Association of Official Analytical Chemists International, 481 North Frederic 500, Gaithersburg, MD 20877-2504, or may be examined at the Office of the Federal Register, 800 North Capitol St suite 700, Washington, DC 20408

[42 FR 14491, Mar. 15, 1977, as amended at 43 FR 14644, Apr. 7, 1978; 49 FR 10104, Mar. 19, 1987 54 FR 24897, June 12, 1989]

#### § 172.515 Synthetic flavoring substances and adjuvants.

Synthetic flavoring substances and adjuvants may be safely used in food in accordance with the following conditions.

(a) They are used in the minimum quantity required to produce their intended effect, and otherwise in accordance with all the principles of good manufacturing practice.

(b) They consist of one or more of the following, used alone or in combination with flavoring substances and adjuvants generally recognized as safe in

food, prior-sanctioned for such use, or regulated by an appropriat section this part.

Acetal; acetaldehyde diethyl acetal. Acetaldehyde phenethyl propyl acetal. Acetanisole; 4'-methoxyacetophenone. Acetophenone; methyl phenyl ketone. Allyl anthranilate.

Allyl butyrate.

Allyl cinnamate.

Allyl cyclohexaneacetate.

Allyl cyclohexanebutyrate. Allyl cyclohexanehexanoate.

Allyl cyclohexaneproprionate.

Allyl cyclohexanevalerate. Allyl disulfide.

Allyl 2-ethylbutyrate.

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Allyl hexanoate; allyl caproate. Allyl a-ionone; 1-(2,6,6-trimethyl-2-cyclo-hex-ene-1-yl)-1,6-heptadiene-3-one. Allyl isothiocyanate; mustard oil. Allyl isovalerate. Allyl mercaptan; 2-propene-1-thiol. Allyl nonanoate. Allyl octanoate. Allyl phenoxyacetate. Allyl phenylacetate. Allyl propionate. Allyl sorbate; allyl 2,4-hexadienoate. Allyl sulfide. Allyl tiglate: allyl trans-2-methyl-2butenoate. Allyl 10-undecenoate. Ammonium isovalerate. Ammonium sulfide. Amyl alcohol; pentyl alcohol. Amyl butyrate. a-Amylcinnamaldehyde. q-Amylcinnamaldehyde dimethyl acetal. d Amylcinnamyl acetate. o-Amylcinnamyl alcohol. c-Amylcinnamyl formate. Amylcinnamyl isovalerate. Amyl formate. Amyl heptanoate. Amyl hexancate.

Amyl octanoate. Anisole; methoxybenzene. Anisyl acetate. Anisyl alcohol; p-methoxybenzyl alcohol. Antiyl butyrate Anisyl formate. hisyl phenylacetate. hisyl propionate. cohwood creosote. dehyde dimethyl acetal. saldehyde glyceryl acetal; 2-phenyl-m-dihttp://doi.org/lene/divolane. methiol; thiophenol. tolp; 2-hydroxy-2-phenylacetophenone. phenone; diphenylketone. ityl acetate, ityl acetate, ityl acetoacetate. ityl alcohol. ivi benzoate. Lvi butyl ether. ntyl butyrate, ntyl butyrate, ntyl culpnamate, ntyl 13 dimethylcrotonate; benzyl methyl yl disulfide; dibenzyl disulfide. ntyl ethyl ether: mayl formate. Fig. 1 formate.

Fig. 1 formate.

Fig. 1 formate.

Fig. 1 formate.

Fig. 1 formate.

Fig. 1 formate.

Fig. 2 formate.

Fig.

Benzyl salicylate. Birch tar oil. Borneol; d-camphanol. Bornyl acetate. Bornyl formate. Bornyl isovalerate. Bornyl valerate. β-Bourbonene; 1,2,3,3a,3bβ,4,5,6,6aβ,6bα-decahydro-la-isopropyl-3a<sub>a</sub>-methyl-6-methylene-cyclobuta [1,2:3,4] dicyclopentene. 2-Butanol. 2-Butanone; methyl ethyl ketone. Butter acids. Butter esters. Butyl acetate. Butyl acetoacetate. Butyl alcohol; 1-butanol. Butyl anthranilate. Butyl butyrate. Butyl butyryllactate: lactic acid. butyl ester, butyrate.  $\alpha$ -Butylcinnamaldehyde. Butyl cinnamate. Butyl 2-decenoate. Butyl ethyl malonate. Butyl formate. Butyl heptanoate. Butyl hexanoate. Butyl p-hydroxybenzoate. Butyl isobutyrate. Butyl isovalerate. Butyl lactate. Butyl laurate. Butvl levulinate. Butyl phenylacetate. Butyl propionate. Butyl stearate. Butyl sulfide. Butyl 10-undecenoate. Butyl valerate. Butyraldehyde. Cadinene. 2,2-dimethyl-3-methylene-Camphene: norbornane. d-Camphor. Carvacrol; 2-p-cymenol. Carvacryl ethyl ether; 2-ethoxy-p-cymene. Carveol; p-mentha-6,8-dien-2-ol. 4-Carvomenthenol; 1-p-menthen-4-ol; terpinenol. cis Carvone oxide; 1,8-epoxy-p-menth-8-en-2one. Carvyl acetate. Carvyl propionate. B-Caryophyllene. Caryophyllene alcohol. Caryophyllene alcohol acetate. β-Caryophyllene oxide; 4-12,12-trimethyl-9methylene-5-oxatricylo [8.2.0.04.6] dodecane. Cedarwood oil alcohols. Cedarwood oil terpenes. 1.4-Cineole. Cinnamaldehyde ethylene glycol acetal. Cinnamic acid.

Cinnamyl acetate.

Cinnamyl alcohol; 3-phenyl-2-propen-1-ol.

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Cinnamyl benzoate. Cinnamyl butyrate. Cinnamyl cinnamate. Cinnamyl formate. Cinnamyl isobutyrate. Cinnamyl isovalerate. Cinnamyl phenylacetate. Cinnamyl propionate. Citral diethyl acetal; 3,7-dimethyl-2,6-octadienal diethyl acetal. Citral dimethyl acetal; 3,7-dimethyl-2,6-octadienal dimethyl acetal. Citral propylene glycol acetal. Citronellal; 3,7-dimethyl-6-octenal; rhodinal. Citronellol; 3,7-dimethyl-6-octen-1-ol; d-citronellol. Citronelloxyacetaldehyde. Citronellyl acetate. Citronellyl butyrate. Citronellyl formate. Citronellyl isobutyrate. Citronellyl phenylacetate. Citronellyl propionate. Citronellyl valerate. p-Cresol. Cuminaldehyde; cuminal; p-isopropyl benzaldehyde. Cyclohexaneacetic acid. Cyclohexaneethyl acetate. Cyclohexyl acetate. Cyclohexyl anthranilate. Cyclohexyl butyrate. Cyclohexyl cinnamate. Cyclohexyl formate. Cyclohexyl isovalerate. Cyclohexyl propionate. p-Cymene. γ-Decalactone; 4-hydroxy-decanoic acid, γlactone. γ-Decalactone; 5-hydroxy-decanoic acid, δlactone. Decanal dimethyl acetal. 1-Decanol; decylic alcohol. 2-Decenal. 3-Decen-2-one; heptylidene acetone. Decyl actate. Decyl butyrate. Decyl propionate. Dibenzyl ether. 4,4-Dibutyl-y-butyrolactone; 4,4-dibutyl-4-hydroxy-butyric acid, \gamma-lactone. Dibutyl sebacate. Diethyl malate. Diethyl malonate; ethyl malonate. Diethyl sebacate. Diethyl succinate. Diethyl tartrate. 2.5-Diethyltetrahydrofuran. Dihydrocarveol; 8-p-menthen-2-ol; 6-methyl-3-isopropenylcyclohexanol. Dihydrocarvone. Dihydrocarvyl acetate. m-Dimethoxybenzene. hydrop-Dimethoxybenzene; dimethyl quinone.

2,4-Dimethylacetophenone.

α,α-Dimethylbenzyl isobutyrate; phenyi methylcarbinyl isobutyrate. 2,6-Dimethyl-5-heptenal. 2,6-Dimethyl octanal; isodecylaldehyde. (3,7-Dimethyl-l-octanol; tetrahydrogeranid acetate; ber a,a-Dimethylphenethyl propyl acetate; bensyldimethylcarbiny etate.  $\alpha,\alpha$ -Dimethylphenethyl . alcoh 1; benzyl carbinol. a, a-Dimethylphenethyl butyrate; dimethylcarbinyl butyrate. a.g-Dimethylphenethyl formate; methylcarbinyl formate. Dimethyl succinate. 1,3-Diphenyl-2-propanone; dibenzyl ketons delta-Dodecalactone; 5-hydroxydodecan acid, deltalactone. Dodecalactone; 4-hydroxydodecanoic ac lactone. 2-Dodecenal. Estragole. ρ-Ethoxybenzaldehyde. Ethyl acetoacetate. Ethyl 2-acetyl-3-phenylpropionate; benzyl acetoacetate. Ethyl aconitate, mixed esters. Ethyl acrylate. Ethyl p-anisate Ethyl anthranilate. Ethyl benzoate. Ethyl benzoylacetate. α-Ethylbenzyl butyrate; α-phenylpropyl Ethyl brassylate; tridecanedioic acid of ethylene glycol diester; cyclo 1,13-eth enedioxytridecan-1,13-dione. 2-Ethylbutyl acetate. 2-Ethylbutyraldehyde. Ethylbutyric acid. Ethyl cinnamate. Ethyl crotonate; trans-2-butenoic acid eth ester. Ethyl cyclohexanepropionate. Ethyl decanoate. 2-Ethylfuran. Ethyl 2-furanpropionate. 4-Ethylguaiacol; 4-ethyl-2-methoxyphenol. Ethyl heptanoate. 2-Ethyl-2-heptenal; 2-ethyl-3-butylacrolein Ethyl hexanoate. Ethyl isobutyrate. Ethyl isovalerate. Ethyl lactate. Ethyl laurate. Ethyl levulinate. Ethyl maltol; 2-ethyl-3-hydroxy-4H-pyran one. Ethyl 2-methylbutyrate. Ethyl myristate. Ethyl nitrite. Ethyl nonanoate. Ethyl 2-nonynoate; ethyl octyne carbonata Ethyl octanoate. Ethyl oleate. Ethyl phenylacetate.

Ethyl 4-phenylbutyrate.

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Ethyl 3-phenylglycidate. Ethyl 3-phenylpropionate: ethyl hydrocinnamate. Ethyl propionate. Ethyl pyruvate. Ethyl salicylate. Ethyl sorbate; ethyl 2,4-hexadienoate. Ethyl tiglate; ethyl trans-2-methyl-2butenoate. Ethyl undecanoate. Ethyl 10-undecenoate. Ethyl valerate. Bucalyptol; 1,8-epoxy-p-menthane; cineole. Bugenyl acetate. Eugenyl benzoate. Eugenyl formate.
Eugenyl methyl
methyl eugenol. ether; 4-allylveratrole; Parnesol: 3,7,11-trimethyl-2,6,10-dodecatrien-Jol. 4 Fenchone; d-1,3,3-trimethyl-2-norbornanone. Penchyl alcohol; 1,3,3-trimethyl-2-norbornanol. Formic acid (Furyl) 2-propanone; furyl acetone. dryl-2-propanone; furyl acetone.

Grayl oil, refined (mixed amyl alcohols).
Grayl acetoacetate; trans-3,7-dimethyl-2, 6octadien-1-yl acetoacetate. Geranyl acetone; 6,10-dimethyl-5,9andecadien-2-one. Geranyl benzoate. anyl butyrate. tranyi formate. Franyl hexanoate ranyl isobutyrate. tranyl isovalerate. tinti propionate. hacol; μ-methoxyphenol. Alacol; α-methoxyphenyl acetate. allicyl phenylacetate. Alene; 1,4-dimethyl-7-isopropenyl-Δ9,10-Abydroazulene. bi acetate: 1.4-dimethyl-7-(α-hydroxy-chronyl)-89,10-octahydroazulene acetate. dialgotones/\*hydroxyheptanoic acid, γnal; enanthaldehyde. fal dimethyl acetal. tanedione; acetyl valeryl. anol. tanone; methyl amyl ketone. danone; ethyl butyl ketone. ptanone; dipropyl ketone. Heptenal; cis-4-hepten-1-al. Viacetate. alcohol; enanthic alcohol. butyrate. Mcinnamate.

ω-6-Hexadecenlactone; 16-hydroxy-6hexadecenoic acid. ω-lactone: ambrettolide. γ-Hexalactone; 4-hydroxyhexanoic acid, γ-lactone; tonkalide. Hexanal; caproic aldehyde. 2,3-Hexanedione; acetyl butyryl. Hexanoic acid; caproic acid. 2-Hexenal. 2-Hexen-1-ol. 3-Hexen-1-ol; leaf alcohol. 2-Hexen-1-yl acetate. Hexenyl isovalerate. 3-Hexenyl 2-methylbutyrate. 3-Hexenyl phenylacetate; cis-3-hexenyl phenylacetate. Hexyl acetate. 2-Hexyl-4-acetoxytetrahydrofuran. Hexyl alcohol. Hexyl butyrate. α-Hexylcinnamaldehyde. Hexyl formate. Hexyl hexanoate. 2-Hexylidene cyclopentanone. Hexyl isovalerate. Hexyl 2-methylbutyrate. Hexyl octanoate. Hexyl phenylacetate; n-hexyl phenylacetate. Hexyl propionate. Hydroxycitronellal; 3,7-dimethyl-7-hydroxyoctanal. Hydroxycitronellal diethyl acetal. Hydroxycitronellal dimethyl acetal. Hydroxycitronellal; 3,7-dimethyl-1,7octanediol. N-(4-Hydroxy-3-methoxybenzyl)-nonanamide; pelargonyl vanillylamide. 5-Hydroxy-4-octanone; butyroin. 4-(p-Hydroxyphenyl)-2-butanone; p-hydroxybenzyl acetone. Indole. a-Ionone; 4-(2,6,6-trimethy)-2-cyclohexen-1yl)-3-buten-2-one. β-Ionone; 4-(2,6,6-trimethyl-1-cyclohexen-1yl)-3-buten-2-one. α-Irone; 4-(2,5,6,6-tetramethyl-2-cyclohexene-1-yl)-3-buten-2-one; 6-methylionone. Isoamyl acetate. Isoamyl acetoacetate. Isoamyl alcohol; isopentyl alcohol; 3-methyl-1-butanol. Isoamyl benzoate. Isoamyl butyrate. Isoamyl cinnamate. Isoamyl formate. Isoamyl 2-furanbutyrate; α-isoamyl furfurylpropionate. Isoamyl 2-furanpropionate; α-isoamyl furfurylacetate. Isoamyl hexancate. Isoamyl isobutyrate. Isoamyl isovalerate Isoamyl laurate. Isoamyl-2-methylbutyrate; isopenty1-2methylbutyrate. Isoamyl nonanoate.

Isoamyl octanoate.

dadecanol; cetyl alcohol.

formate. Hyl isobutyrate.

octanoate.

Isoamyl phenylacetate. Isoamyl propionate. Isoamyl pyruvate. Isoamyl salicylate. Isoborneol. Isobornyl acetate. Isobornyl formate. Isobornyl isovalerate. Isobornyl propionate. Isobutyl acetate. Isobutyl acetoacetate. Isobutyl alcohol. Isobutyl angelate; isobutyl cis-2-methyl-2butenoate. Isobutyl anthranilate. Isobutyl benzoate. Isobutyl butyrate. Isobutyl cinnamate. Isobutyl formate. Isobutyl 2-furanpropionate. Isobutyl heptanoate. Isobutyl hexanoate. Isobutyl isobutyrate. α-Isobutylphenethyl alcohol; isobutyl benzyl carbinol; 4-methyl-1-phenyl-2-pentanol. Isobutyl phenylacetate. Isobutyl propionate. Isobutyl salicylate. 2-Isobutylthiazole. Isobutyraldehyde. Isobutyric acid. Isoeugenol; 2-methoxy-4-propenylphenol. Isoeugenyl acetate. Isoeugenyl benzyl ether; benzyl isoeugenol. Isoeugenyl ethyl ether; 2-ethoxy-5-propenylanisole; ethyl isoeugenol. Isoeugenyl formate. Isoeugenyl methyl ether; 4-propenylveratrole; methyl isoeugenol. Isoeugenyl phenylacetate.
Isojasmone; mixture of 2-hexylidenecyclopentanone and 2-hexyl-2-cyclopenten-1-one.
Isomethylionone;
4-(2,6,6-trimethyl-2-Isomethylionone; 4-(2,6,6-trimethyl cyclohexen-1-yl)-3-methyl-3-buten-2-one; methyl y-ionone. Isopropyl acetate. ρ-Isopropylacetophenone. Isopropyl alcohol; isopropanol. Isopropyl benzoate. ρ-Isopropylbenzyl alcohol; cuminic alcohol: p-cymen-7-ol. Isopropyl butyrate. Isopropyl cinnamate. Isopropyl formate. Isopropyl hexanoate. Isopropyl isobutyrate. Isopropyl isovalerate. ρ-Isopropylphenylacetaldehyde; ρ-cymen-7carboxaldehyde. Isopropyl phenylacetate. 3-(p-Isopropylphenyl)-propionaldehyde; p-isopropylhydrocinnamaldehyde; cuminyl acetaldehyde. Isopropyl propionate. Isopulegol; p-menth-8-en-3-ol. Isopulegone; p-menth-8-en-3-one. Isopulegyl acetate.

Isoquinoline. Isovaleric acid. cis-Jasmon; 3-methyl-2-(2-pentenyl) penten-1-one. Lauric aldehyde; dodecanal. Lauryl acetate. Lauryl alcohol; 1-dodecanol. Lepidine; 4-methylquinoline. Levulinic acid. Linalcol oxide; cis- and trans-2-viny yl-5-(1'-hydroxy-1'-methylethyl) hydrofuran. Linalyl anthranilate; octadien-3-yl anthranilate. Linalyl benzoate. Linalyl butyrate. Linalyl cinnamate. Linalyl formate. Linalyl hexanoate. Linalyl isobutyrate. Linalyl isovalerate. Linalyl octanoate.
Linalyl propionate.
Maltol; 3-hydroxy-2-methyl-4H-pyran-4 Menthadienol; p-mentha-1,8(10)-dien-9-6 p-Mentha-1,8-dien-7-ol; perillyl alcohol. Menthadienyl acetate; p-mentha-1,8(10) 9-yl acetate. -Menth-3-en-1-ol. 1-p-Menthen-9-yl acetate; p-menth-1-9 acetate. Menthol; 2-isopropyl-5-methylcyclohera Menthone; p-menthan-3-one. Menthyl acetate; p-menth-3-yl acetate. Menthyl isovalerate; p-menth-3-yl valerate. o-Methoxybenzaldehyde. p-Methoxybenzaldehyde; p-anisaldehyde o-Methoxycinnamaldehyde. 2-Methoxy-4-methylphenol; gualacol; 2-methoxy-p-cresol. (p-Methoxyphenyl)-2-butanone; anisy tone. 1-(4-Methoxyphenyl)-4-methyl-1-penten-3one; methoxystyryl isopropyl ketone. 1-(p-Methoxyphenyl)-1-penten-3-one; methylanisylidene acetone; ethone. 1-(p-Methoxyphenyl)-2-propanone; anisylmethyl ketone; anisic ketone. 2-Methoxy-4-vinylphenol; p-vinylguaiacol. Methyl acetate. 4'-Methylacetophenone; p-methylaceto phenone; methyl p-tolyl ketone. 2-Methylallyl butyrate; 2-methyl-2-prop yl butyrate. Methyl anisate.
o-Methylanisole; o-cresyl methyl ether. p-Methylanisole; p-cresyl methyl ether; methoxytoluene. Methyl benzoate. Methylbenzyl acetate, mixed o-,m-,p-.  $\alpha$ -Methylbenzyl acetate; styralyl acetate. α-Methylbenzyl alcohol; styralyl alcohol. α-Methylbenzyl butyrate; styralyl butyrate α-Methylbenzyl isobutyrate; styralyl iso

butyrate

α-Methylbenzyl formate; styralyl formate.

Food and Drug Administration, HHS a-Methylbenzyl propionate; styralyl propio-2-Methyl-3-buten-2-ol. 2-Methylbutyl isovalerate. Methyl p-tert-butylphenylacetate. 2-Methylbutyraldehyde; methyl ethyl acetaldehyde. 3-Methylbutyraldehyde; isovaleraldehyde. Methyl butyrate. 2 Methylbutyric acid. a-Methylcinnamaldehyde. p-Methylcinnamaldehyde. Methyl cinnamate. 2-Methyl-1,3-cyclohexadiene. Methylcyclopentenolone; 3-methylcyclopentane-1,2-dione. Methyl disulfide; dimethyl disulfide. Methyl ester of rosin, partially hydrogenated defined \$ 172.615); in methyl dihydroabletate. Methyl heptanoate. 2-Methylheptanoic acid. 6-Methyl-3,5-heptadien-2-one. Methyl-5-hepten-2-ol. 6-Methyl-5-hepten-2-one. Methyl hexanoate. Methyl 2-hexanoate. Methyl p-hydroxybenzoate; methylparaben. Methyl a-ionone; 5-(2,6,6-trimethyl-2-cyclohexen-1-yl)-4-penten-3-one. Methyl β-ionone; 5-(2,6,6-trimethyl-1-cyclohexen-1-y1)-4-penten-3-one. Methyl A-ionone; 5-(2,6,8-trimethyl-3-cyclohexen-1-yl-)-4-penten-3-one. Methyl isobutyrate. 2-Methyl-3-(p-isopropylphenyl)-propionaldehyde: a-methyl-p-isopropylhydrocinnamal- dehyde; cyclamen aldehyde. Methyl isovalerate. Methyl laurate. Methyl mercaptan; methanethiol. Methyl o-methoxybenzoate. Rethyl N-methylanthranilate; dimethyl anthranilate. Atthyl 2-methylbutyrate.
Methyl-3-methylthiopropionate. Methyl 4-methylvalerate.

Methyl 4-methylvalerate.

Methyl 4-methylvalerate.

Methyl 5-methyl ketone; 2-acetonaph
thons. thone.

1 this nonancate.

1 this nonancate.

1 this 2-nonencate.

1 this 2-nonyncate; methyloctyne car-

Donate.

Cotanoate; methyl hexyl acetaldehyde.

Cotanoate.

Cotanoate; methyl heptine car-

Angenyi-2,3-pencanone; methyl isobutyl ke-

ethylphenethyl alcohol; hydratropyl al-

bonate delivit-23-pentanedione;

hyl phenylacetate.

n)

0-

h-

6-

2-Methyl-4-phenyl-2-butyl acetate; dimethylphenylethyl carbinyl acetate. 2-Methyl-4-phenyl-2-butyl isobutyrate: dimethylphenyl ethylcarbinyl isobutyrate. 3-Methyl-2-phenylbutyraldehyde; α-isopropyl phenylacetaldehyde. Methyl 4-phenylbutyrate.
4-Methyl-1-phenyl-2-pentanone; benzyl isobutyl ketone. Methyl 3-phenylpropionate; methyl hydrocinnamate. Methyl propionate. 3-Methyl-5-propyl-2-cyclohexen-1-one. Methyl sulfide. 3-Methylthiopropionaldehyde; methional. 2-Methyl-3-tolylpropionaldehyde, mixed o-, 2-Methylundecanal; methyl nonyl acetaldehyde. Methyl 9-undecenoate. Methyl 2-undecynoate; methyl decyne carbonate. Methyl valerate. 2-Methylvaleric acid. Myrcene; 7-methyl-3-methylene-1,6-octa-Myristaldehyde; tetradecanal. 2-isopropyl-5-methylcyclod-Neomenthol; hexanol. Nerol; cis-3,7-dimethyl-2,6-octadien-1-ol. Nerolidol; 3,7,11-trimethyl-1,6,10-dodecatrien-3-01 Neryl acetate. Neryl butyrate. Neryl formate. Neryl isobutyrate. Neryl isovalerate. Neryl propionate. 2,6-Nonadien-1-ol. γ-Nonalactone; 4-hydroxynonanoic acid, γlactone; aldehyde C-18. Nonanal; pelargonic aldehyde. 1,3-Nonanediol acetate, mixed esters. Nonancic acid; pelargonic acid. 2-Nonanone; methylheptyl ketone. 3-Nonanon-1-yl acetate; 1-hydroxy-3nonanone acetate. Nonyl acetate. Nonyl alcohol; 1-nonanol. Nonyl octanoate. Nonyl isovalerate. Nootkatone: 5,6-dimethyl-8-isopropenylbicyclo[4,4,0]-dec-1-en-3-one. Ocimene; trans-\(\text{p-ocimene}\); 3,7-dimethyl-1,3,6octatriene. γ-Octalactone; 4-hydroxyoctanoic acid, γ-lactone. Octanal; caprylaldehyde. Octanal dimethyl acetal. 1-Octanol; octyl alcohol. 2-Octanol. 3-Octanol. 2-Octanone; methyl hexyl ketone. 3-Octanone; ethyl amyl ketone. 3-Octanon-1-ol. 1-Octen-3-ol; amyl vinyl carbinol.

1-Octen-3-yl acetate.

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Ootyl acetate. 3-Octyl acetate. Octyl butyrate. Octyl formate. Octyl heptanoate. Octyl isobutyrate. Octyl isovalerate. Octyl octanoate. Octyl phenylacetate. Octyl propionate. ω-Pentadecalactone; 15-hydroxypentadecanoic acid, w-lactone; pentadecanolide; angelica lactone. 2,3-Pentanedione; acetyl propionyl. 2-Pentanone; methyl propyl ketone. 4-Pentenoic acid. 1-Penten-3-ol. Perillaldehyde; 4-isopropenyl-1-cyclohexene-1-carboxaldehyde;p-mentha-1,8-dien-7-al. Perillyl acetate; p-mentha-1,8-dien-7-yl acetate α-Phellandrene; ρ-mentha-1,5-diene. Phenethyl acetate.
Phenethyl alcohol; β-phenylethyl alcohol. Phenethyl anthranilate. Phenethyl benzoate. Phenethyl butyrate Phenethyl cinnamate. Phenethyl formate. Phenethyl isobutyrate. Phenethyl isovalerate. Phenethyl 2-methylbutyrate. Phenethyl phenylacetate. Phenethyl propionate. Phenethyl salicylate. Phenethyl senecioate; phenethyl methylacrylate. Phenethyl tiglate. Phenoxyacetic acid. 2-Phenoxyethyl isobutyrate. Phenylacetaldehyde; a-toluic aldehyde. Phenylacetaldehyde 2,3-butylene glycol ace-Phenylacetaldehyde dimethyl acetal. Phenylacetaldehyde glyceryl acetal. Phenylacetic acid; a-toluic acid. 4-Phenyl-2-butanol; phenylethyl methyl carbinol. 4-Phenyl-3-buten-2-ol; methyl styryl carbinol. 4-Phenyl-3-buten-2-one. 4-Phenyl-2-butyl acetate; phenylethyl methyl carbinyl acetate. 1-Phenyl-3-methyl-3-pentanol; phenylethyl methyl ethyl carbinol. 1-Phenyl-1-propanol; phenylethyl carbinol. 3-Phenyl-1-propanol; hydrocinnamyl alcohol. 2-Phenylpropionaldehyde; hydratropaldehyde. 3-Phenylpropionaldehyde; hydrocinnamaldehyde. 2-Phenylpropionalde-hyde dimethyl acetal; hydratropic aldehyde dimethyl acetal.

3-Phenylpropionic acid; hydrocinnamic acid.

3-Phenylpropyl acetate. 2-Phenylpropyl butyrate.

3-Phenylpropyl cinnamate.

3-Phenylpropyl formate. 3-Phenylpropyl hexanoate. 2-Phenylpropyl isobutyrate. 3-Phenylpropyl isobutyrate. 3-Phenylpropyl isovalerate. 3-Phenylpropyl propionate. 2-(3-Phenylpropyl)-tetrahydrofure α-Pinene; 2-pinene. β-Pinene; 2(10)-pinene. Pine tar oil. Pinocarveol; 2(10)-pinen-3-ol. Piperidine. Piperine. d-Piperitone; p-menth-1-en-3-one. Piperitenone; p-mentha-1,4(8)-dien-3-or Piperitenone oxide; 1,2-epoxy-p-ment en-3-one. Piperonyl acetate; heliotropyl acetat Piperonyl isobutyrate. Polylimonene. Polysorbate 20; polyoxyethylene (20) 60 monolaurate. Polysorbate 60; polyoxyethylene (20) 8 monostereate. Polysorbate 80; polyoxyethylene (20) monooleate. Potassium acetate. Propenylguaethol; 6-ethoxy-m-anol. Propionaldehyde. Propyl acetate. Propyl alcohol; 1-propanol. p-Propyl anisole; dihydroanethole. Propyl benzoate. Propyl butyrate. Propyl cinnamate. Propyl disulfide. Propyl formate. Propyl 2-furanacrylate. Propyl heptanoate. Propyl hexanoate. Propyl p-hydroxybenzoate; propylpara 3-Propylidenephthalide. Propyl isobutyrate. Propyl isovalerate. Propyl mercaptan. α-Propylphenethyl alcohol. Propyl phenylacetate. Propyl propionate. Pulegone; p-menth-4(8)-en-3-one. Pyridine. Pyroligneous acid extract. Pyruvaldehyde. Pyruvic acid. Rhodinol: 3,7-dimethyl-7-octen-1-ol; citronellol. Rhodinyl acetate. Rhodinyl butyrate. Rhodinyl formate. Rhodinyl isobutyrate. Rhodinyl isovalerate. Rhodinyl phenylacetate. Rhodinyl propionate. Rum ether; ethyl oxyhydrate Salicylaldehyde. Santalol, q and ß. Santalyl acetate. Santalyl phenylacetate.

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Sorbitan monostearate. Styrene. Sucrose octaacetate. a-Terpinene. Terpinene. a-Terpineol; p-menth-1-en-8-ol. 6-Terpineol. Terpinolene; p-menth-1,4(8)-diene. Terpinyl acetate. Terpinyl anthranilate. Terpinyl butyrate. Terpinyl cinnamate. Terpinyl formate. Terpinyl isobutyrate. Terpinyl isovalerate. Terpinyl propionate. Tetrahydrofurfuryl acetate. Tetrahydrofurfuryl alcohol. Tetrahydrofurfuryl butyrate. Tetrahydrofurfuryl propionate.
Tetrahydro-pseudo-ionone; 6,10-dimethyl-9d undecen-2-one. Tetrahydrolinalool; 3,7-dimethyloctan-3-ol. Tetramethyl ethylcyclohexenone; mixture of 5-ethyl-2,3,4,5-tetramethyl-2-cyclohexen-1-

one and 5-ethyl-3,4,5,6-tetramethyl-2-cyclohexen-1-one. 2-Thienyl mercaptan; 2-thienylthiol. Thymol. Tolualdehyde glyceryl acetal, mixed o, m, p. Tolualdehydes, mixed o, m, p.
Tolylacetaldehyde.
Tolyl acetate; o-cresyl acetate.

Prolyl acetate; p-cresyl acetate. (p-Tolyl)-2-butanone; p-methylbenzylace-

Tolyl isobutyrate.

f Dyl laurate.

Thyl laurate.

Tolyl phenylacetate.

Tolyl propionaldehyde; p-methylhydragroud aldehyde.

Thylyl acetylcitrate.

Tridecenal. A Undecadione; acetyl nonyryl. L Indecalactone; 4-hydroxyundecanoic acid ist lactone; peach aldehyde; aldehyde C-14.

decanone methyl nonyl ketone. Undecenal; undecenoic aldehyde.

Audecenia, which is the control of t Undecen-1-yl acetate.

ndeav alcohol, Alcohode; pentanal. Lieric acid, pentanoic acid. millin acetate; acetyl vanillin.

eralfaldenyde. erbenol; 2-pinen-4-ol.

Scrone 4 (4 hydroxy-3-methoxyphenyl)-2-(c)15 - 4-Decalactone decalactone when used separately or and combination in oleomargarine are at levels not to exceed 10 parts per million and 20 parts per million, respectively, in accordance with § 166.110 of this chapter.

(d) BHA (butylated hydroxyanisole) may be used as an antioxidant in flavoring substances whereby the additive does not exceed 0.5 percent of the essential (volatile) oil content of the flavoring substance.

[42 FR 14491, Mar. 15, 1977, as amended at 42 FR 23148, May 6, 1977; 43 FR 19843, May 9, 1978; 45 FR 22915, Apr. 4, 1980; 47 FR 27810, June 25, 1982; 48 FR 10812, Mar. 15, 1983; 48 FR 51907, Nov. 15, 1983; 49 FR 5747, Feb. 15, 1984; 50 FR 42932, Oct. 23, 1985; 54 FR 7402, Feb. 21, 1980; 1980 1989; 61 FR 14245, Apr. 1, 1996]

# § 172.520 Cocoa with dioctyl sodium sulfosuccinate for manufacturing.

The food additive "cocoa with dioctyl sodium sulfosuccinate for manufacturing," conforming to \$163.117 of this chapter and \$172.810, is used or intended for use as a flavoring substance in dry beverage mixes whereby the amount of dioctyl sodium sulfosuccinate does not exceed 75 parts per million of the finished beverage. The labeling of the dry beverage mix shall bear adequate directions to assure use in compliance with this section.

#### § 172.530 Disodium guanylate.

Disodium guanylate may be safely used as a flavor enhancer in foods, at a level not in excess of that reasonably required to produce the intended effect.

#### § 172.535 Disodium inosinate.

The food additive disodium inosinate may be safely used in food in accordance with the following prescribed conditions:

(a) The food additive is the disodium salt of inosinic acid, manufactured and purified so as to contain no more than 150 parts per million of soluble barium in the compound disodium inosinate with seven and one-half molecules of water of crystallization.

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(3) Rigid and semirigid containers. (1) gylonitrile/butadiene/styrene copolyr-for use only as piping for handing food products and for repeatedarticles intended to contact food.
(ii) Acrylonitrile/styrene resin—no

estrictions.

(iii) Acrylonitrile/butadiene copolyper blended with polyvinyl chloride redn-for use only as extruded pipe.

(b) Limitations for acrylonitrile monomer extraction for finished foodattact articles, determined by using be method of analysis titled "Gasolid Chromatographic Procedure for Determining Acrylonitrile Monomer in Acrylonitrile-Containing Polymers and food-Simulating Solvents," which is proporated by reference. Copies are vallable from the Center for Food acty and Applied Nutrition (HFS Food and Drug Administration,

0 St. SW., Washington, DC 20204, or Milable for inspection at the Office of the Federal Register, 800 North Capitol et, NW., suite 700, Washington, DC

(1) In the case of single-use articles ing a volume to surface ratio of 10 illiliters or more per square inch of contact surface—0.003 milligram/ quare inch when extracted to equithium at 120 °F with food-simulating lyents, appropriate to the intended ditions of use.

in the case of single-use articles will a volume to surface ratio of less [10] milliliters per square inch of willing the surface 0.3 part per milcontact surface 0.3 part per mildelegiated on the basis of the vol-to the container when extracted to the container with food-simu-

History at, 120 °F with 100u-simulation at, 120 °F with 100u-s batch usage utilizing food-simuyus solvents and temperatures apobriate to the intended conditions of

100d-simulating solvents shall in-Pricent or 50 percent ethanol, Pricent action and either nplane or an appropriate oil or fat.

Acrylonitrile monomer may ant a hazard to health when indisted! Accordingly, any food-contact

article containing acrylonitrile copolymers or resins that yield acrylonitrile monomer in excess of that amount provided for in paragraph (b) of this section shall be deemed to be adulterated in violation of section 402 of the Act.

[42 FR 14638, Mar. 15, 1977, as amended at 47 FR 11850, Mar. 19, 1982; 54 FR 24899, June 12,

#### § 181.33 Sodium nitrate and potassium nitrate.

Sodium nitrate and potassium nitrate are subject to prior sanctions issued by the U.S. Department of Agriculture for use as sources of nitrite, with or without sodium or potassium nitrite, in the production of cured red meat products and cured poultry products.

[48 FR 1705, Jan. 14, 1983]

#### § 181.34 Sodium nitrite and potassium nitrite.

Sodium nitrite and potassium nitrite are subject to prior sanctions issued by the U.S. Department of Agriculture for use as color fixatives and preservative agents, with or without sodium or potassium nitrate, in the curing of red meat and poultry products.

[48 FR 1705, Jan. 14, 1983]

### PART 182—SUBSTANCES GENERALLY RECOGNIZED AS SAFE

### Subpart A—General Provisions

Sec.

182.1 Substances that are generally recognized as safe.

182.10 Spices and other natural seasonings and flavorings.

182.20 Essential oils, oleoresins (solventfree), and natural extractives (including distillates).

40 Natural extractives (solvent-free) used in conjunction with spices, 182 40 Natural seasonings, and flavorings.

182.50 Certain other spices, seasonings, essential oils, oleoresins, and natural extracts.

182,60 Synthetic flavoring, substances and adjuvants.

182.70 Substances migrating from cotton and cotton fabrics used in dry food packaging.

182.90 Substances migrating to food from paper and paperboard products.

182.99 Adjuvants for pesticide chemicals.

Subpart	B-Muitiple	Purpose ances	GRAS	Food
	JUDSK	CEICUS		

182.1045	
182.1047	
182.1057	Hydrochloric acid.
182.1073	Phosphoric acid.
183.1087	Sodium acid pyrophosphate.
182.1125	Aluminum sulfate:
182.1127	Aluminum ammonium sulfate.
182,1129	Aluminum potassium sulfate.
182,1131	Aluminum sodium sulfate.
182,1180	Caffeine.
182,1217	Calcium phosphate.
182,1235	Caramel.
182,1320	Glycerin.
182.1480	Methylcellulose.
182.1600	
182.1516	Monoammonium glutamate.
182.1711	Monopotassium glutamate.
182.1745	Silica aerogel.
182.1748	Sodium carboxymethylcellulose
182.1778	Sodium caseinate.
182.1781	Sodium phosphate.
	Sodium aluminum phosphate.
182.1810	Sodium tripolyphosphate.

# Subport C—Anticoking Agents

182.2122	Aluminum calcium silicate.
182.2227	Calcium silicate.
182.2437	Magnesium silicate.
182.2727	Sodium aluminosilicate.
182.2729	Sodium calcium aluminosilicate
hydr	ated.
	Tricalcium silicate

#### **Subpart D—Chemical Preservatives**

182.3013	Ascorbic acid.
182.3041	Erythorbic acid.
182.3089	Sorbic acid.
182.3109	Thiodipropionic acid.
182.3149	Ascorbyl palmitate.
182.3169	Butylated hydroxyanisole.
182.3173	Butylated hydroxytoluene.
182.3189	Calcium ascorbate.
182.3225	Calcium sorbate.
182.3280	Dilauryl thiodipropionate.
182.3616	Potassium bisulfite.
182.3637	Potassium metabisulfite.
182.3640	Potassium sorbate.
182.3731	Sodium ascorbate.
182.3739	Sodium bisulfite.
182.3766	Sodium metabisulfite.
182.3795	Sodium sorbate.
182.3798	Sodium sulfite.
182.3862	Sulfur dioxide.
182.3890	Tocopherols.
	•

# SubpartE—EmulsityIng Agents [Reserved]

# SubpartF—Dietary Supplements [Reserved]

### , Subpart G—Sequestrants

182.6085 Sodium acid phosphate.

182.6197	Calcium diacetate.
182,6203	Calcium hexameterhess.
182,6215	Monobasic calcium phosphate.
182.6285	Disconding Caronum phosphate
	PIPO CASSILLI PROSENATA
182.6290	Dipotassium phosphate.  Disodium phosphate.
182.6757	Sodium gluconata 'S'to
182,6760	Sodium hexametaphosphate.
	Sommin nexametaphosphata
182.6769	Sodium metaphosphate.
182.6778	Sodium phosphate.
182.6787	Godine management
	Soutum pyrophosphate.
182.6789	Tetra sodium pyrophospha
182.6810	Tetra sodium pyrophosphate. Sodium tripolyphosphate.
	Someth of the the thought of the
	Subport M_Stabilian 12.15

#### andril 1--- simplifelt

Subpart I-Nutrients

102.1200	Chondrus	extract.

	-Calg	ż
182.8013	Ascorbic acid	
182.8159	Biotin. in the the state	
182.8217		
182.8223	Calcium propagations	
182.8250	Choline bitartrate.	í
182.8252	Choline chloride.	•
182.8778	Sodium phosphate.	٠
182.8890	Tocopherols.	j
182.8892	a-Tocopherol acetate.	
182.8985		
182.8988	Zinc gluconate.	
182.8991	Zinc oxide.	
182.8994	Zinc stearate.	ď
182.8997	Zinc sulfate.	,

AUTHORITY: 21 U.S.C. 321, 342, 348, 371.

Source: 42 FR 14640, Mar. 15, 1977, units

# Subpart A-General Provisions

# 182.1 Substances that are general recognized as safe.

(a) It is impracticable to list all substances that are generally recognized as safe for their intended use. However, by way of illustration, the Commissioner regards such common food ingredients as salt, pepper, vinegar, baking powder, and monosodium glutamate as safe for their intended use. This part includes additional substances that, when used for the purposes indicated, in accordance with good manufacturing practice, are regarded by the Commissioner as generaly recognized as safe for such uses.

(b) For the purposes of this section, good manufacturing practice shall be defined to include the following restrictions:

 The quantity of a substance added to food does not exceed the amount reasonably required to accomplish its

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itended physical, nutritional, or other schnical effect in food; and

(2) The quantity of a substance that ecomes a component of food as a reult of its use in the manufacturing, rocessing, or packaging of food, and hich is not intended to accomplish ny physical or other technical effect n the food itself, shall be reduced to he extent reasonably possible.

(3) The substance is of appropriate ood grade and is prepared and handled is a food ingredient. Upon request the commissioner will offer an opinion, assed on specifications and intended ise, as to whether or not a particular rade or lot of the substance is of suitible purity for use in food and would generally be regarded as safe for the purpose intended, by experts qualified to evaluate its safety.

(c) The inclusion of substances in the list of nutrients does not constitute a linding on the part of the Department that the substance is useful as a supplement to the diet for humans.

(d) Substances that are generally recognized as safe for their intended use within the meaning of section 409 of the act are listed in this part. When the status of a substance has been reevaluated, it will be deleted from this part, and will be issued as a new regulation under the appropriate part, e.g., "affirmed as GRAS" under part 184 or 186 of this chapter; "food additive regulation" under parts 170 through 180 of this chapter; "interim food additive regulation" under part 180 of this chapter; or "prohibited from use in food" under part 189 of this chapter.

[42 FR 14640, Mar. 15, 1977, as amended at 53 FR 44875, Nov. 7, 1988]

# § 182.10 Spices and other natural seasonings and flavorings.

Spices and other natural seasonings and flavorings that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Common name	Botanical name of plant source
talka herb and seed	Medicago sativa L.
koice	Pimenta officinalis Lindi.
forette seed	Hibiscus abelmoschus L.
Qelica	Angelica archangelica L. or other spp. of Angelica.
getica root	
Qelica seed	Do.
Wishina (cusparia bark)	Galipea officinalis Hancock.
Maria (cuspana bark)	Pimpinella anisum L
sar sar	Illicium verum Hook, f.
Cernon balm)	Melissa officinalis L
	Colours minimum I
Sweet	Ocimum basilicum L.
5W961	Laurus nobilis L.
	Calendula officinalis L.
Mhouta	Anthemis nobilis L.
monile (chamomile), English or Roman	Matricaria chamomilia L
illiomile (chamomile), German or Hungarian	
oliv.	Capparis spinosa L
<b>Official</b>	Capsicum frutescens L. or Capsicum annuum L.
They -	Carum carvi L.
Chirty, black (black cumin)	Nigelia sativa L
(cardamon)	Elettaria cardamomum Maton.
Meta Chinese	Cinnamomum cassia Blume.
Padang or Batavia	Cinnamomum Dumianii Billina.
Salgon	
Warne pepper	Capsicum frutescens L. or Capsicum annuum L.
997y seed	
Chervi	
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Allium schoenoprasum L.
Granon, Ceylon	Cinnamomum zeylanicum Nees.
Commence of the commence of th	Cinnamomum cassia Blume.
Thamon, Chinese	
Marrion, Salgon	Salvia sclarea L.
(clary sage)	. Sama scarea L.
	I Intolium BOD
MATERIAL CONTROL CONTR	. I Conandrum sauvum 🗠
ACTOR INCHES	. I Sambucus cariaucius L.
PLTT PRO COMMON	. I FOSUCULUIT AMBRIA MIII.
( T T TO REPORT (Financhia Classes (appell	I FORNICUITITI VUIGITE MIN. Vai. GUICO (DO./ 1207
Mugraek (infoccnio, Fiorence fernier)	Trigonella foenum-graecum L.

Common name	Botanical name of plant source	
Galanga (galangal)	Alpinia officinarum Hance.	
Geranium	Pelargonium ano.	•
Ginger	Zingiber officinale Rosc.	
Grains of paradise	Amomum melecueta Rosc.	
Horehound (hoarhound)	Marrubium vulgare L.	
Horseradish		
Hysaop		-
Lavender	Levandula officinalis Chab.	4
Unden flowers	Tila spp.	7, ,
Mace		7: 7:
Marigold, pot	Calendula officinalis L.	٠. ٠
Marjoram, pot	Majorana onites (L.) Benth.	** !
Marjoram, sweet		1.00
Mustard, black or brown	Brassica nigra (L.) Koch.	
Mustard, brown	Brassica Juncea (L.) Coss.	
Mustard, white or yellow		
Nutrneg	Myristica fragrans Houtt.	
Oregano (oreganum, Mexican oregano, Mexican	n Lippia spp.	
sage, origan).		: .
Paprika		
Parsley		
Sepper, black		٠.
Pepper, cayenne	. Capsicum frutescens L. or Capsicum annuum L.	
Pepper, red	.   Do.	
Pepper, white		:
Pappermint		
of marigoid		
ot marjoram		
losemary	in the second of	
afron		
age		
age, Greek	Salvia officinalis L. Salvia triloba L.	
avory, summer		
avory, winter	Satureia hortensis L. (Satureja). Satureia montana L. (Satureja).	
esame	Sesamum Indicum L. (Satureja).	
pearmint	Mentha spicata L.	
tar anise	Mickum verum Hook, f.	
агтадоп	Artemisia dracunculus L.	
hyme	Thymus vulgaris L.	
hyme, wild or creeping	Thymus serpyflum L.	
umeric	Curcuma longa L.	
enilla	Vanilla planifolia Andr. or Vanilla tahitensis J. W. Moore.	
edoary	Curcuma zedoaria Rosc.	

[42 FR 14640, Mar. 15, 1977, as amended at 43 FR 3705, Jan. 27, 1978; 44 FR 3963, Jan. 19, 1978; 50 FR 21044, May 22, 1985; 61 FR 14246, Apr. 1, 1996]

# § 182.20 Essential oils, oleoresins (solvent-free), and natural extractives (including distillates).

Essential oils, oleoresins (solvent-free), and natural extractives (includ-

ing distillates) that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Common name	Botanical name of plant source
Alfalfa	Medicago sativa L. Pimenta officinalis Lindi.
Ambrette (seed)	Batsch.  Batsch.  Hibbsus moschatus Moench.  Angelica archangelica L.  Oo.
Angelica stem	Do. Galipea officinalis Hancock. Pimpinella anisum L.
Asafetida	Ferula assa-toetida L and related spp. of Ferula. Melissa officinalis L. Myroxyton peretrae Klotzsch.

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	Common name	Botanical name of plant source
Ow lawse		Laurus nobilis L.
Bey loaves		Pimenta racemosa (Mill.) J. W. Moore.
pany (myrcia oli).		Citrus aurantium L. subsp. bergamia Wright et Am.
Bergamot (bergar	not orange)	Prunus amygdatus Batsch, Prunus armeniaca L., or Prunus persica (
<b>Bitter almond (fre</b>	from prussic acid)	
		Batsch.
Rois de rose		Aniba rosaeodora Ducke.
2000		Theobroma cacao L.
Same-lie (aleana	mile) flowers, Hungarian	Matricaria chamomilla L.
Camomile (chami	mile) nowers, rungarian	Anthemis nobilis L.
Çamomile (chame	omile) flowers, Roman or English	Cananga odorata Hook. f. and Thoms.
Cananga		Cananga otoriaa rook. I. alio rooma panuum l
Caosicum		Capsicum frutescens L. and Capsicum annuum L.
Cataway		Carum carvi L.
Contamora cood	(cardamon)	Elettaria cardamomum Maton.
Camb base		Ceratonia siliqua L.
C#00 0881		Daucus carota L
Cerror		Croton eluteria Benn.
Cescarilla bark	***************************************	
Cassia bark, Chir	ese	Cinnamomum cassia Blume.
Cassia bark. Pad	ang or Batavia	Cinnamomum burmanni Biume.
Carda hartr Salc	nn	Cinnamomum tourenti riees.
Calant soud		Aplum graveolens L.
Corety seed		Prunus serotina Ehrh.
Unerry, wild, bank		Anthriscus cerefolium (L.) Hoffm.
Chervit		
Chilcory		Cichorium Intybus L.
Cinnamon bank C	Seylon	Cinnamomum zeylanicum Nees.
Cinnamor bark	Chinese	
Manager bank	AMI030	
winamon bank, t	Salgon	
Ohnamon leaf, C	eylon	
Cinnamon leaf, C	hinese	Cinnamomum cassia Blume.
Dinnamon leaf. S	aigon	Cinnamomum loureini Nees.
Imnolla		Cymbopogon nardus Rendle.
The sector	·····	Citrus spp.
New /		Salvia sclarea L.
wany (dary sage)		THE WAR AND THE STREET
Coca (decocainiz	ed)	Erythroxylum coca Lam. and other spp. of Erythroxylum.
Cotton	*	Coffee spp.
Animioet	***************************************	
Minin (cummin)		
Curacao orange	peel (orange, bitter peel)	Citrus aurantium L.
Cusparia bark		I Galinea officinalis Hancock.
Name and LOOK "		Agropyron repens (L.) Beauv.
Kod Bussa (dnac	(grass, triticum)	
Lider flowers		
Estragole (esdra	ol, esdragon, tarragon)	Artemisia dracunculus L.
Estracion (tarrano	on)	. Do
Finance evenor	-	] Foeniculum vulgare Mill.
Minister of	***************************************	Trigonetta foenum-graecum L.
Tainflack	······································	Alpinia officinarum Hance.
ນູຍຊູກga (galang	an)	
Gerantum	- , 	Pelargonium spp.
Geranken, East	ndian	Cymbopogon martini Stapt.
General manage	indian introduction	
Minne		Zingiber officinale Rosc.
Qer		Chan pendici Mari
grapetruit	••••	. Citrus paradisi Macf.
Olava		. Psidium spp.
Hickory hark		. Carya spp.
	hound)	
Boul news	(POU(PG)	
Hyssop	***************************************	. Hyssopus officinalis L.
mmodella		Helichrysum augustifolium DC.
Miliper (bernes)		. Juniperus communis L.
Kola nut		Cola acuminata Schott and Endl., and other spp. of Cola.
Laurel barries		Laurus nobilis L.
Chirol to		Laurus sop.
AAAAAAAA		Lavandula officinalis Chaix.
urvender, spike	***************************************	Lavandula latifolia Vill.
Lavandin		Hybrida between Lavandula officinalis Chaix and Lavandula latifolis vis.
		Composition for a marrier
l'amana		I a
Lemon balm (se	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Cymbopogon citratus DC. and Cymbopogon lexuosus Stapf.
Lemon grass		
Lemon grass	•••••	
Lemon grass		i Chius adraminola Owngro.
Lemon grass		I Onius auranaiona ownigio.
Lemon grass		
Lemon grass		451
Lemon grass		

Common name	Botanical name of plant source
Linden flowers	Tilla spp.
LOCURI DORN	Ceretoria ellous I
Lupusn	Humulus lupulus L
MSCO COSM	I Abrillan Arran Land III
Mandarin	Commitment of the commitment o
Marjoram, sweet	Majorana hortensia Moench.
Maté	llex paraguariensis St. Hil.
Melissa (see balm).	2.7
Menthol	Mentha spp.
Menthyl acetate	Do.
Molasses (extract)	Saccarum officinarum L.
Mustard	Benedica and
Naringin	
Neroli, bigarade	Citrus paradisi Maci.
Nutrineg	Citrus aurantium L
Onion	
Orange, bitter, flowers	
Orange, bitter, peel	Citrus aurantium L.
Orange leaf	Do.
Orange, sweet	
Transa russa Samen	Do.
Orange, sweet, flowers	Do.
Orange, sweet, peel	Do.
Origanum	Origanum spp.
almarosa	Cymbopogon martini Stapf.
'apnka	Capsicum annuum I
arsley	Petroselinum crispum (Mill.) Manst.
epper, black	
epper, white	Program L.  Mentha piperita L.
eppermint	Mentha piperita L.
'envian balsam	Myroxylon persing Klotzsch
engrain	Citrus surportium I
etitgrain lemon	
etitgrain mandarin or tangerine	Citrus itmon (L.) Burm. f.
imenta	Dimonto ell'aballa i taut
imenta leaf	Primenta officinalis Lindi.
ipsissewa leaves	There are the second se
omegranate	Chimaphita umbellata Nutt.
rickly ash bark	
	Xanthoxylum (or Zanthoxylum) Americanum Mill. or Xanthoxylum clavi hercutis L.
lose absolute	Rosa alba L., Rosa centifolia L., Rosa damascena Mill., Rosa galica (
	and vars of those one
lose (otto of roses, attar of roses)	I Do ''
0S8 buds	1 Da
ose flowers	Do.
ose fruit (hlips)	i Do
ose geranium	Pologophum amus days a tit
ose leaves	Pelargonium graveciens L'Her.
osemary	Rosa spp.
affron	Rosmarinus officinalis L.
100	Crocus sativus L.
ige	Salvia officinalis L.
ge, Greek	Salvia triloba L.
ige, Spanish	Salvia lavandulaefolia Vahi.
John's bread	Ceratonia siliqua L.
ivory, summer	Satureia hortensle I
vory, winter	I Saturaia montana I
hinus molie	Schinus molle I
pe berries (blackthorn berries)	Promis spinosa i
earmint	Months entents t
ike lavender	Lavendida latifolia Vill
marind	Tamarindus indica L
ngerine	Citrus esticulate Planes
падоп	Citrus reticulata Blanco.
a	Artemisla dracunculus L.
yme	
yme, white	Thymus vulgaris L. and Thymus zygis var. gracilis Boiss.
yrra wild as craceing	DO.
yme, wild or creeping ticum (see dog grass).	Thymus serpyllum L.
ucum (SAB dod maes)	1949 Te and 1949 Te
man (and dog grada).	Pollanthes tuberosa L.
berose	
meric	Curcuma longa L
berose	Curcuma longa L.
berose rmeric milla Met flowers	Curcuma longa L Vanilla planifolia Andr. or Vanilla tahitensis J. W. Moore Vola oforata I.
berose meric nilla slet flowers slet leaves	Curcuma longa L.     Vanilla planifolia Andr. or Vanilla tahitensis J. W. Moore.     Viola odorata L.
berose rmeric nilla solet flowers let leaves let leaves absolute	Curcuma longa L.     Vanilla planifolia Andr. or Vanilla tahitensis J. W. Moore.     Viola odorata L.

# ood and Drug Administration, HHS

## § 182.60

Common name	Botanical name of plant source
Nang-yiang	Cananga odorata Hook. f. and Thoms. Curcuma zedoaria Rosc.

[42 FR 14640, Mar. 15, 1977, as amended at 44 FR 3963, Jan. 19, 1979; 47 FR 29953, July 9, 1982; 48 FR 51613, Nov. 10, 1983; 50 FR 21043 and 21044. May 22, 1985]

# §182.40 Natural extractives (solvent-free) used in conjunction with spices, seasonings, and flavorings.

(solvent-free) extractives Natural with spices, conjunction

seasonings, and flavorings that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

dsed in conjunction with approximation		
Common name	Botanical name of plant source	
Peach kernel (persic oil)  Peanut stearine  Peanut stearine  Peanut stearine	Prunus armeniaca L. Prunus persica Sieb. et Zucc. Arachis hypogaea L. Cydonia oblonga Miller.	

[42 FR 14640, Mar. 15, 1977, as amended at 47 FR 47375, Oct. 26, 1982]

#### spices, other \$182.50 Certain essential oils, seasonings, essential oleoresins, and natural extracts.

Certain other spices, seasonings, essential oils, oleoresins, and natural extracts that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Ψ.	
Common name	Derivation
Ambergris Castoreum Civet (zibeth, zibet, zibetum)	Physeter macrocephalus L. Castor fiber L. and C. canadensis Kuhl. Civet cats, Viverra civetta Schreber and Viverra zibetha Schreber. Ethyl cenanthate, so-called. Musk deer, Moschus moschiferus L.

#### 182.60 Synthetic flavoring substances and adjuvants.

Synthetic flavoring substances and Synthetic Havoring Supported States are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Acetaldehyde (ethanal).

Acetoin (acetyl methylcarbinol).

Anethole (parapropenyl anisole).

Benzaldehyde (benzoic aldehyde).

N-Butyric acid (butanoic acid).

de or l-Carvone (carvol).

Çinnamaldehyde (cinnamic aldehyde).

Citral (2,6-dimethyloctadien-2,6-al-8, geranial, neral).

Decanal (N-decylaldehyde, capraldehyde, capric aldehyde, caprinaldehyde, aldehyde € C-10).

Ethyl acetate.

Ethyl butyrate.

3-Methyl-3-phenyl glycidic acid ethyl ester (ethyl-methyl-phenyl-glycidate, so-called strawberry aldehyde, C-16 aldehyde).

Ethyl vanillin.

Geraniol (3,7-dimethyl-2,6 and 3,6-octadien-1-

Geranyl acetate (geraniol acetate).

Limonene (d-, l-, and dl-).

Linalool (linalol, 3,7-dimethyl-1,6-octadien-3ol).

Linalyl acetate (bergamol).

(methyl-2anthranilate Methyl

aminobenzoate).

Piperonal (3,4-methylenedioxy-benzaldehyde, heliotropin).

Vanillin.

[42 FR 14640, Mar. 15, 1977, as amended at 43 FR 47724, Oct. 17, 1978; 44 FR 3963, Jan. 19, 1979; 44 FR 20656, Apr. 6, 1979; 48 FR 51907, Nov. 15, 1983; 54 FR 7402, Feb. 21, 1989]

